

REMARKS

Claims 1-21 are pending in the application. Claims 10-21 have been withdrawn from consideration. Claims 1-9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Waack et al. (U.S. Pat. No. 3,235,626). Claims 1-4 and 9 also stand rejected under 35 U.S.C. § 102(b) as being anticipated by Milkovich et al. (U.S. Pat. No. 3,989,768). The Specification is objected to. Applicants respectfully traverse these rejections.

Objections to Specification

The objection to the Specification is based on two contentions. First, the reference to U.S. Pat. No. 5,190,547 at page 9, line 19 is considered irrelevant. Second, the term "sultone" is objected to as an unrecognized term.

The reference to U.S. Pat. No. 5,190,547 is relevant for the purposes stated in the Specification and its removal from the Specification should not be required. Applicants respectfully request the withdrawal of the objection or further clarification of the basis for the objection.

The term "sultone" is a recognized term in the art. In particular, sultones are intramolecular cyclic esters of hydroxy sulfonic acids, analogous to lactones. Applicants submit herewith a copy of the definition of sultone from the on-line IUPAC Compendium of Chemical Terminology, 2nd Edition, 1997, which can be found at the following Internet link:

<http://www.iupac.org/publications/compendium/index.html>

The withdrawal of the objection to the term "sultone" is respectfully requested.

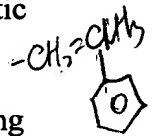
35 U.S.C. § 102(b) Rejections

Claims 1-4 and 9 stand rejected as being anticipated by Milkovich et al. In particular, it is alleged that Milkovich et al. "teaches a vinyl terminated macromer in Example 2 (col. 28, lines 20-25)." *See, Action* at p. 2. Applicants respectfully traverse this rejection.

Under 35 U.S.C. § 102, "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P. § 2131 (quoting *Verdegaal Bros. v. Union Oil Co.*, 814 F.2d 628, 631, 2 U.S.P.Q.2d

1051, 1053 (Fed. Cir. 1987)). Milkovich et al. fails to expressly or inherently describe each and every recitation of Claims 1-4 and 9 and therefore fails to anticipate those claims.

Claim 1 specifically recites "terminal olefin functionalized macromonomers of the formula: $H_2C=CH-Z-(Q)_y\text{-poly}$," which are not expressly or inherently described by Milkovich et al. because the compound of Milkovich et al. does not include the component Q of the claimed formula. In particular, Claim 1 defines Q as "a hydrocarbyl group derived by incorporation of a compound selected from the group consisting of conjugated dienes, alkenylsubstituted aromatic compounds and mixtures thereof." The compounds of Milkovich et al. do not include hydrocarbyl groups derived by incorporation of a compound selected from the group consisting of conjugated dienes, alkenylsubstituted aromatic compounds or mixtures thereof. The failure of Milkovich et al. to expressly or inherently describe such hydrocarbyl groups precludes an anticipation rejection of Claim 1. See, *Verdegaal Bros. v. Union Oil Co.*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987).



Claims 2-4 and 9 depend from Claim 1, which is not anticipated. The failure of Milkovich et al. to expressly or inherently describe each and every recitation of independent Claim 1 also precludes an anticipation rejection of dependent Claims 2-4 and 9 because each of those claims inherit the recitations of Claim 1 by dependency.

For at least the foregoing reasons, Milkovich et al. fails to anticipate Claim 1 and dependent Claims 2-4 and 9.

Claims 1-9 also stand rejected as being anticipated by Waack et al., which allegedly "teaches a vinyl terminated macromer prepared by anionically polymerizing monomers such as butadiene and isoprene with initiator such as allyl lithium." See, *Action* at p. 3. Waack et al., however, does not expressly or inherently describe terminal olefin functionalized macromonomers having the formula " $H_2C=CH-Z-(Q)_y\text{-poly}$ " as recited in independent Claim 1. For instance, Waack et al. does not expressly or inherently describe a macromonomer having "a hydrocarbyl group derived by incorporation of a compound selected from the group consisting of conjugated dienes, alkenylsubstituted aromatic compounds and mixtures thereof" as recited in Claim 1. The failure of Waack et al. to describe such a macromonomer precludes a 35 U.S.C. § 102(b) anticipation rejection of Claim 1.

Claims 2-9 depend from Claim 1 and therefore inherit the recitations of Claim 1. The failure of Waack et al. to expressly or inherently describe all of the recitations of Claim 1 precludes a description of all of the recitations of dependent Claims 2-9. Therefore, Claims 2-9 are also not anticipated by Waack et al.

For at least the foregoing reasons, Waack et al. fails to anticipate Claims 1-9 under 35 U.S.C. § 102(b).

In support of the rejection based on Waack et al. the Action indicates that "it would have been obvious to a skilled artisan at the time the invention was made to employ the teaching of Waack to prepare a macromer by polymerizing monomers such as butadiene and isoprene with allyl lithium initiator because such is within the generic disclosure of the reference and all of the embodiments of the reference are expected to work and in the absence of any showing of criticality and unexpected results." *See, Action* at p. 3. The pending claims, however, do not recite a method of preparing a macromer by polymerizing monomers with allyl lithium initiators. Instead, the claims are drawn to terminal olefin functionalized macromonomers having a specific formula. Furthermore, the Action's statement appears to be related to a 35 U.S.C. § 103 obviousness rejection, which has not been made in the instant case. It is unclear as to how this allegation applies to the rejection of Claims 1-9, but it certainly does not establish the alleged anticipation rejection.

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Filed: March 20, 2001
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CONCLUSION

The concerns of the Examiner addressed in full, Applicants respectfully request withdrawal of the outstanding rejections and the issuance of a Notice of Allowance forthwith. The Examiner is encouraged to direct any questions regarding the foregoing to the undersigned, who may be reached at (919) 854-1400.

Respectfully submitted,

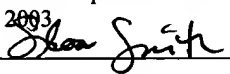


Devin R. Jensen
Registration No. 44,805

Customer Number 20792
Myers Bigel Sibley & Sajovec
Post Office Box 37428
Raleigh, NC 27627
Telephone: (919) 854-1400
Facsimile: (919) 854-1401

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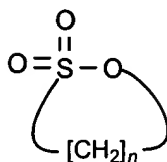
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on September 9, 2003.


Sloan Smith



sultones

Intramolecular cyclic esters of hydroxy *sulfonic acids*, analogous to *lactones*.



1995, 67, 1370